Department of the Interior



Year 2000 Management Plan

Version 1.7

Chief Information Officer Office of Information Resources Management

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Foreword

The Year 2000 (Y2K) computer problem presents a very real threat to the Department of the Interior's computers and information systems. This threat is not just confined to disruption of our mission and administrative activities. The health and safety of our employees and the public are also at risk because of the possible malfunction of devices that depend on embedded computer microchips. Identifying and correcting Y2K computer problems are Secretarial priorities. I regard this as one of the most serious operational and administrative problems we have ever faced; one with a potentially disastrous outcome which is unstoppable should we fail to respond correctly.

The Y2K date problem is not restricted to any one functional area within the DOI. It includes business functions such as financial management, personnel management, contract management, health and safety, and many others. Computers support our land and mineral leasing operations and Indian financial transactions, which are major contributors to U.S. revenues. Of equal concern is the prospect of major portions of our infrastructure malfunctioning or failing to work at all, such as dams, elevators, and aircraft.

This document is an important step in the Department of Interior's attempt to deal effectively with the Y2K problem. It is intended to provide our sense of the scope of the problem in Interior as well as a sound strategy and management approach for dealing with it. The information contained within this plan has never been gathered together in quite this form and as such represents a milestone in its own right. It is also a credit to the employees who are dedicated to making sure that the Department of Interior makes a successful transit into the next century with it's computers and systems fully operational. Because of the dynamic nature of the Year 2000 problem, this plan will be updated, as necessary.

Chief Information Officer, Department of the Interior

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I. Executive Summary

The Year 2000 (Y2K) date problem is but one term used to describe the potential failure of information technology (IT) systems, applications, and hardware prior to, on or after January 1, 2000. This potential problem exists because of the widespread practice of using two digits, not four, to represent the year in computer databases, software applications, embedded chip technologies (found in ships, planes, etc.), and hardware chips used in microcomputers that are used daily on employees' desktops. Difficulties will arise in 2000 when that year is designated as "00" and our systems will be unable to differentiate it from the year 1900. The associated but unrelated calendar anomaly that must be taken into consideration in our Y2K systems repairs is the fact that 2000 is a leap year unlike other century dates.

The Department of Interior's IT investment includes an extensive array of hardware and software which is threatened by the Y2K dilemma and which is also an indispensable part of the Department's mission activities. To leave any part of this investment to the uncertainty of a possible Y2K disaster is unthinkable, and so the Department is embarked on an aggressive path to make sure our systems and associated technology infrastructure continue to function with the arrival of the new millennium.

Left unchecked, what impact will the Year 2000 problem have on Departmental systems? As with almost all organizations - both public and private - the DOI will be greatly affected if our information technology resources are not Y2K compliant by late 1999. Due to the far-reaching missions of the Department, any resulting failures could greatly impair many functional areas, be widespread, and potentially costly. For example:

- Control systems that regulate water flow and generators in our Nation's dams, which produce over 42 billion kilowatts of energy each year, may fail;
- Visitors to our National Parks may need life saving equipment, such as defibrillator's, which are date sensitive;
- Aircraft and related equipment needed for search and rescue may become inoperable or unsafe on January 1, 2000;
- Disbursement of royalty accounting information and funds may be delayed or calculated incorrectly;
- Some seismograph networks and devices that detect and analyze ground motion may not provide their intended early warnings for earthquakes; and

• Embedded microchip technology may affect testing, monitoring, lab, and medical equipment, as well as facilities with security systems, etc.

We define mission critical to be those systems that when their capabilities are degraded, the organization realizes a resulting loss of a core capability or life or property are threatened.

Our goal is to have these systems, hardware, and embedded chip technologies Y2K compliant before March of 1999. This will be accomplished through the replacement or modification of existing systems and technology dependent equipment using the Federally adopted five step approach: awareness, assessment, renovation, validation, and implementation. And this will not be an inexpensive undertaking. We estimate that the cost of achieving our goal will approach \$100 million (including embedded chip technology and telecommunications, which are not shown in the chart below), some of which has not been formally identified in the Department's fiscal year (FY) 1998 - 1999 budgets.

Mission Critical System's Status as of December 1, 1998						
Bureau/Office	MC Systems	Compliant	To Replace	To Repair		
OS	10	10	0	0		
USGS	13	12	0	1		
NPS	2	2	0	0		
OSM	16	16	0	0		
FWS	2	2	0	0		
BLM	12	10	0	2		
MMS	4	4	0	0		
BIA	15	14	0	1		
BOR	16	16	0	0		
Totals	90	86	0	4		
%	100%	96%	0%	4%		

Assisted by senior information technology (IT) officials, Y2K Executives, and the DOI Y2K Project Team, the Department's Chief Information Officer (CIO) has the responsibility to lead our Y2K efforts. An important first step is the development of a plan that will provide the framework for ensuring that the Department is ready to meet the new millennium with its systems and infrastructure intact and fully functional. Failing to protect the nation's resources for the benefit of present and future generations is not an option. As a result, the *Department of the Interior's Year 2000 Management Plan* focuses on the resolution of the Y2K problem by providing an overall strategy for managing our mission critical systems and infrastructure.